

**BY ORDER OF THE
375TH AIRLIFT WING COMMANDER**



**SCOTT AIR FORCE BASE
INSTRUCTION 21-120**

21 MARCH 2003

Maintenance

**CRASH-DAMAGED/DISABLED AIRCRAFT
RECOVERY (CDDAR)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: 375 MXG/MXQ (MSgt Richter),
932 MXG/MXQ/126 MXS/MXMA
Supersedes Logistics Operating Instruction (LOI)
21-120, 20 December 2001

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This instruction establishes policy, responsibility, and procedural guidelines to support an effective Crash Recovery Program; applies to active duty, Air Reserve Technicians, Air Force Reserves, civilian employees, and civilian contractor personnel who manage, fly, service, inspect, maintain, or repair 375th Airlift Wing (AW), 126th Air Refueling Wing (ARW), Aero Club, and transient aircraft. **This is a joint Scott AFB, 126 ARW, and 932 AW instruction.** *NOTE:* Due to the realignment of the Air Force Maintenance Group organizational structure, LOI 21-120 has been superseded by SAFBI 21-120, *Crash-Damaged/Disabled Aircraft Recovery (CDDAR)*. The guidance in this instruction is applicable to all aircraft and personnel on Scott AFB.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

LOI 21-120 was converted to SAFBI 21-120 to realign with the Air Force Maintenance Group (MXG) organizational structure; minor administrative changes were incorporated.

1. Policy.

1.1. The Crash Recovery Program is established to recover damaged and disabled aircraft in minimum time and consistent with the following considerations:

1.1.1. The requirement to reopen the runway for operational use.

1.1.2. Preservation of evidence for accident investigation.

1.1.3. Safety of personnel involved with recovery operations.

1.1.4. In accordance with AFI 91-204, *Safety Investigations and Reports*, when an aircraft is under investigation by the Interim Safety Investigation Board, recovery operations will NOT pro-

ceed until the board president releases the aircraft. Personnel who are not engaged in the investigation will remain outside of the recovery area. The crash recovery team may be called upon to perform tasks as required by the investigation team.

WARNING

Incidents involving aircraft made up of a composite structure may cause serious injury or death to those in contact. Transient aircraft home bases should be contacted to determine composite and depleted uranium material risks and any requirement for personal protective equipment.

CAUTION

The aircraft and crash site will only be disturbed only as required to eliminate an imminently dangerous situation to the aircraft, support equipment and/or personnel, and will remain in an undisturbed state until the aircraft is released to maintenance by the On-Scene Commander (OSC).

1.2. The alternate landing location for on-base accidents is MidAmerica Airport and vice versa for accidents at MidAmerica Airport. In case of Taxiway G obstruction, use Interstate 64, U.S. Highways 4 and 161 as alternate routes for vehicle access to MidAmerica Airport.

1.3. Heavy equipment (i.e., aircraft tugs and aerospace ground equipment (AGE)) are available through 375 MXS and 126 MXS for base assets. Crane, bulldozer, backhoe, dump truck, and front-end loader capabilities are available from 375 CES as well. Fill rock or gravel, plywood, and shoring lumber are available on base or through the local off-base contractor. Other equipment requirements are in OPLAN 32-95, *Disaster Preparedness Operations Plan*.

1.4. Defuel and Fuel Spill Procedures.

1.4.1. 375 LRS/POL and the 126 ARW have defuel capabilities for all base assets.

1.4.2. The Fire Department and CES Spill Response Team have fuel-spill capabilities. The 375 MXS has a limited spill clean-up capability.

1.5. In conjunction with the major accident response exercises conducted by Disaster Preparedness on a recurring basis, ensure that the CDDAR team exercises and demonstrates the capability to perform recovery operations. Test phone numbers are listed in this instruction to ensure currency and review as required. The Exercise Evaluation Team will document the exercise training and currency of data in a Memorandum for Record and take corrective action on discrepancies.

2. Maintenance Operations Center (MOC).

2.1. The senior controller will comply with the MOC controller checklist and quick reaction checklists when notified of an aircraft mishap requiring recovery of a disabled or damaged aircraft.

2.2. Notify all agencies over the radio net of the incident.

2.3. Notify 375 MXG/CC, 375th Operations Group (OG)/CC, and 375 AW/CC of the incident.

- 2.4. Upon request from the OSC or maintenance, contact the transient aircraft home base and request TO guidance for aircraft recovery operations. Headquarters AMC transient aircraft must contact home base through HQ AMC/LGRC at 229-1963.
- 2.5. The OSC and Pro Super will coordinate and request MOC to dispatch the CDDAR team via a designated safe route to the accident scene as directed or requested.
- 2.6. Ensure radio communication is maintained with the designated maintenance representative in case additional personnel and/or equipment are required.
- 2.7. In the event that an aircraft recovery requires movement of cargo by normal or alternate means, contact 375 LRS/LGRR Readiness Flight at 256-3076 for personnel and equipment.

3. Equipment Maintenance Flight.

- 3.1. The Inspection Section will train and equip personnel for CDDAR duties.
- 3.2. Prepare to deploy crash recovery equipment and personnel as necessary.
- 3.3. Once notified of a crash through MOC, the Inspection Section will assemble the crash recovery team.
- 3.4. The Inspection Section, under direction of the OSC, will perform the recovery or removal operation. The CDDAR team will report to and receive orders exclusively from the OSC.
- 3.5. The Inspection Section will maintain the crash recovery trailer/equipment in serviceable condition. All crash-response equipment and inventory are located in the crash trailer. Additional materials, preformed steep planks, cables, and disabled wheel dolly are located in Hangar One. The 126 MXS has KC-135-unique equipment stored at their location.
- 3.6. Training on CDDAR procedures/equipment will be conducted annually and documented in G081 Course ACFT 000100, *Crash Recovery Procedures*. See paragraph 1.5. of this instruction for exercise requirements.
- 3.7. Applicable TOs will be available in the event of a crash recovery and reviewed quarterly to ensure familiarization and currency of technical data. Listed below are the applicable TOs for recovery of base assets (**Table 1.** and **Table 2.**):

Table 1. Crash Recovery TOs.

<i>TO</i>	Title
35D3-32-3-1	Dolly, Disabled Wheel, Aircraft Towing-Type MHU-104/E
32D5-5-3-11	Pneumatic Bag, Aircraft, Lifting 12-Ton Cap Type F-2 and F-1 Operating Instructions (OI).
35DA4-16-1	Operations and Maintenance Instructions with IPB – Control Console, Pneumatic Bag, Aircraft Lifting PN 9601 (Hydraulic Technology)
	<i>Illinois Air National Guard (ANG) Equipment</i>
35DA4-16-1	Control Console, Pneumatic Bag
35D5-5-3-11	Pneumatic Bag, F2
35A2-2-9-11	Tripod Jack, 30 Ton, Type B4
35A2-2-53-1	Dolly, Disabled Wheel, Aircraft Towing, 45 Ton, Model 5923

Table 2. Aircraft TOs.

1C-9A-2-6	Dimensions and Areas
1C-9A-2-7	Lifting and Shoring
1C-9A-2-9	Towing and Taxiing
1C-9A-2-10	Parking and Mooring
C-21A	Chapter 6 – Dimensions and Areas
Maintenance	Chapter 7 – Lifting
Manuals	Chapter 10 – Mooring
1C-135(K)A-3-1	Structural Repair Instructions
1C-135A-2-1-1	Maintenance Cross Servicing Guide

4. Aircraft Generation Flight (MXMA) (C-9 Aircraft).

4.1. Maintains quick response checklists in the Pro Super and Expeditor vehicles to protect personnel, aircraft, and other property from further damage.

4.2. Provides equipment and personnel as requested during the recovery operation, provides personnel support to assist the Inspection Section in rendering the aircraft safe for investigation board members, and assists the recovery operation (e.g., defueling aircraft if needed), and provides a fully operational tow vehicle and qualified operator during the recovery operation.

5. C-21A Aircraft Maintenance Operations.

5.1. Inspection Section (host base) is responsible for lifting and recovering C-21A aircraft.

5.2. Contractor will assist and provide technical advice to the CDDAR team.

5.3. Contractor will provide C-21A maintenance manuals as required.

6. Illinois ANG, 126 ARW (KC-135E) Maintenance Operations.

6.1. The ANG CDDAR team will provide the necessary personnel and equipment to safely and effectively recover KC-135E aircraft and to remove, tag, package, and transport parts and debris to a designated area. The 126 MXG will provide equipment and personnel as requested during the recovery operation.

6.2. Actual recovery operations will be under the supervision of the CDDAR team chief. The team chief will:

6.2.1. Assemble and brief the CDDAR team on the location and condition of the damaged aircraft and coordinate with the host base recovery team.

6.2.2. Review appropriate technical publications and establish a recovery plan.

6.2.3. Assemble and transport equipment and material to the crash site.

6.2.4. Make arrangements to acquire necessary removal equipment when unit equipment proves inadequate.

7. Listing of Key Agencies. The following agencies are listed to receive assistance and requisition supplies.

Table 3. Listing of Key Agencies.

Agency	Phone Number	Agency	Phone Number
375 MOS/MXOOM	256-2331	126 ARW/MOC	222-4147
375 MXG/CC	256-3523	126 ARW/SF	222-5180
375 MXS/CC	256-3150	126 ARW/ CP	222-4255
375 OG/CC	256-3609	126 ARW QA	222-4132
375th Air Field Manager	256-4101	126 MXG/CC	222-4119
375 AW/CP	256-2615/2630	126 MXS/CC	222-4137
375 SFS Manager	256-8963	126 ARW/CC	222-5770
375/932 MXG/QA	256-8774		
375 AW/CC	256-3751	HQ AMC/LGRC	229-1963
932 AW/CC	229-7000		
932 MXG/CC	256-3630		
375th Product Improvement Mgr	256-5878	HQ AMC Program Mgr	229-4142
375 LRS Petroleum, Oil, & Lubricants	256-5051	Environmental Protection Agency	346-5120
375 LRS Transportation	256-2471	375 CES Customer Serv	256-2202
		Bio-Environmental Eng	256-7307
C-21 Contractor	256-4747		

DARREN W. McDEW, Colonel, USAF
Commander

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 21-101, *Maintenance Management of Aircraft*
AFI 21-101, Air Mobility Command (AMC) Supplement 1, *Aerospace Equipment Maintenance Management*
AFI 91-204, *Safety Investigations and Reports*
AFMAN 32-4004, *Emergency Response Operation*
375 AW OPLAN 32-95, *Disaster Preparedness Operations Plan*
375 AW SPLAN 91-204, *Mishap Response Plan for Safety Investigations*
TO 1-1-638, *Repair and Disposal of Aerospace Vehicles*
SAFBI 21-120, *Crash-Damaged/Disabled Aircraft Recovery (CDDAR)*

Abbreviations and Acronyms

AFI—Air Force Instruction
AGE—Aerospace Ground Equipment
ANG—Air National Guard
ARW—Air Reserve Wing
AW—Airlift Wing
CDDAR—Crash-Damaged/Disabled Aircraft Recovery
CES—Civil Engineering Squadron
LRS—Logistics Readiness Squadron
MOC—Maintenance Operations Center
MOS—Maintenance Operations Squadron
MXG—Maintenance Group
MXS—Maintenance Squadron
OG—Operations Group
OSC—On-Scene Commander
POL—Petroleum, Oil, and Lubricants
QA—Quality Assurance
SCR—Special Certification Roster
SE—Safety Office

TO—Technical Order

Terms

Disabled Aircraft—An aircraft that cannot or should not be moved under its own power, but can be towed using its own undercarriage.

Damaged Aircraft—An aircraft that cannot be removed under its own power or by towing on its own undercarriage without sustaining considerable secondary damage.